

GAO

Report to the Chairman, Committee on
Governmental Affairs, U.S. Senate

February 1992

ORGANIZATIONAL CULTURE

Techniques Companies Use to Perpetuate or Change Beliefs and Values



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The Honorable John Glenn
Chairman, Committee on Governmental
Affairs
United States Senate

Dear Mr. Chairman:

In a series of reports on managing defense inventories, we have noted continuing operational problems. A consensus developed among the Department of Defense, your office, and us that, to fully correct the problems, the Department needs to change its inventory management culture so that more value and emphasis are given to economy and efficiency. In response to your request, we obtained views from experts in the private sector on the techniques they use in changing or perpetuating an "organizational culture." In follow-on work, we will be reporting on the Defense Department's efforts to change its inventory management culture.

Background

"Organizational culture" may be defined as the underlying assumptions, beliefs, values, attitudes, and expectations shared by an organization's members. There is a consensus among organizational culture experts that an organization's beliefs and values affect the behavior of its members. The organizational culture concept was not widely written about until the early 1980s; however, long before that, the leaders of some organizations created and perpetuated beliefs and values to engender behavior they thought would result in organizational success. Although views about whether and how an organization can change its culture vary considerably, today, many organizations are actively trying to perpetuate some cultural values and change others to increase their chances for being competitive or effective.

We discussed organizational culture with five academics that have researched the subject and officials of nine large companies that had diverse, global interests and were concerned about inventory management. Although the companies may be perpetuating some values and changing others, of the nine, three—Federal Express, Johnson & Johnson, and 3M—have mostly been attempting to perpetuate their cultures, and six—AT&T, Corning, DuPont, Ford, IBM, and Motorola—have mostly been attempting to change their cultures.

Results in Brief

According to several experts we spoke with, an organization's decision to change its culture is generally triggered by a specific event or situation. A change in the world situation, international competition, or a severe budget reduction are some events that could provide the impetus for an organizational culture change. For example, the oil shocks of the 1970s and the increase in international, particularly Japanese, competition spurred Ford's change in culture.

The experts generally agreed that a culture change is a long-term effort that takes at least 5 to 10 years to complete. Company officials believe that two key techniques are of prime importance to a successful culture change:

- Top management must be totally committed to the change in both words and actions.
- Organizations must provide training that promotes and develops skills related to their desired values and beliefs.

The nine companies indicated that effecting a successful culture change would require using a combination of many techniques—not just the two most important. Other techniques, of varying importance, include distributing a written statement of the desired values and beliefs to employees; creating a specific management style that reinforces the desired values and beliefs; offering rewards, incentives, and promotions to encourage behavior that reinforces these beliefs; holding company gatherings to discuss these beliefs; developing an organizational structure that is compatible with these beliefs; using systems, procedures, and processes to support organizational values; and using stories, legends, myths, and slogans to communicate these values and beliefs.

The experts noted that these techniques could be used to perpetuate as well as to change an organizational culture.

Appendix I provides a detailed description of the techniques discussed in this letter, and appendix II lists the academics with whom we discussed the organizational culture concept.

Importance of Techniques for Perpetuating or Changing Organizational Culture

Company officials we interviewed rated the techniques they use to change or perpetuate their organizational cultures by degree of importance (see table 1).

Table 1: Techniques Organizations Use to Perpetuate or Change Their Culture

Degree of Importance	Technique
Very great	Display top management commitment and support for values and beliefs.
	Train employees to convey and develop skills related to values and beliefs.
Great	Develop a statement of values and beliefs.
	Communicate values and beliefs to employees.
	Use a management style compatible with values and beliefs.
	Offer rewards, incentives, and promotions to encourage behavior compatible with values and beliefs.
	Convey and support values and beliefs at organizational gatherings.
	Make the organization's structure compatible with values and beliefs. ^a
Moderate	Set up systems, procedures, and processes compatible with values and beliefs. ^a
	Replace or change responsibilities of employees who do not support desired values and beliefs. ^a
	Use stories, legends, or myths to convey values and beliefs.
	Make heroes or heroines of exemplars of values and beliefs.
Some	Recruit employees who possess or will readily accept values and beliefs. ^a
	Use slogans to symbolize values and beliefs.
	Assign a manager or group primary responsibility for efforts to change or perpetuate culture. ^a

Note: DuPont based its responses on techniques used in its Materials, Logistics, and Services Division, which is at the forefront of its culture change. Motorola based its responses on its six sigma efforts to reduce defects in products and services to no more than 3.4 per million.

^aCompany officials' views of the importance of this technique varied markedly.

The companies we visited use many of the techniques in table 1, though they sometimes differ on their degree of importance. AT&T and Ford also stressed the importance of creating an atmosphere of cooperation and partnership with unions in changing their cultures. Ford stressed creating an atmosphere of partnership with its suppliers and its automobile dealers as well. When the views of the six companies that have mostly been attempting to change their cultures are aggregated separately, the assigned degrees of importance differ from those presented in table 1 in the following ways:

- Replacing or changing organizational members' responsibilities becomes of great importance.
- Making the company's structure compatible with values and beliefs becomes of moderate importance.
- Assigning a manager or group responsibility for leading company efforts becomes of moderate importance.

Scope and Methodology

In gathering information for this report, we reviewed literature on the organizational culture concept and discussed the concept with five academics who have researched the subject. We discussed efforts to perpetuate or change cultures with officials of nine companies whose management attention to culture is prominent in recent literature, and we obtained examples of the companies' uses of the techniques described in table 1. The companies are not intended to represent a scientific sample of all companies that closely monitor their cultures.

Unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from its issue date. At that time, we will send copies of the report to other interested congressional committees and Members of Congress; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director, Defense Logistics Agency; the Director, Office of Management and Budget; and the academics and company officials that commented on organizational culture. We will also make copies available to others on request.

Please contact me on (202) 275-8412 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in cursive script, reading "Donna Heivilin". The signature is written in black ink and is positioned above the printed name and title.

Donna M. Heivilin
Director, Logistics Issues

Contents

Letter	1
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Appendix I	8
Techniques That Are	
Important to	
Perpetuating or	
Changing an	
Organizational Culture	
Top Management Support	8
Training	8
A Statement of Values and Beliefs	9
Communicating Desired Values and Beliefs	9
Management Style	10
Rewards, Incentives, and Promotions	11
Organizational Gatherings	11
Organizational Structure	11
Systems, Procedures, and Processes	12
Staff Changes	12
Stories, Legends, and Myths	13
Company Heroes and Heroines	14
Hiring the Right People	14
Slogans	15
Assigning a Culture Manager	15

Appendix II	16
Academics With Whom	
We Discussed	
Organizational Culture	

Appendix III	17
Major Contributors to	
This Report	

Selected Bibliography	18
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Techniques That Are Important to Perpetuating or Changing an Organizational Culture

Several techniques used to perpetuate or change an organizational culture recurred in our review of academic literature and in discussions with academics and company officials. According to these sources, the techniques are useful in both perpetuating and changing a culture. Two techniques are often considered critical: top management support and training. Although these two techniques are, by consensus, the most important in making a successful culture change, company officials generally agreed that using just these two would not necessarily result in success. Rather, they are usually used in combination with other techniques, discussed in this appendix, which vary in importance and use depending on an organization's needs.

Top Management Support

When a company is motivated to change its culture, strong top management leadership and a display of commitment and support for desired beliefs and values are considered crucial to its success. Senior officials must articulate and live by organizational values and beliefs to demonstrate to employees that top management is committed to making permanent cultural changes and is not merely paying lip service to them.

Companies have used various means to explain new values and beliefs and to motivate acceptance and internalization of them. For example, top management officials often discuss the organizational values and beliefs in meetings, internal publications and television networks, and videotapes. They also implement employees' suggestions that support the organization's values and beliefs and reward them for their accomplishments.

To achieve success, top management needs to ensure that all facets of the organization—reward and promotion systems, the organizational structure and management style, training, communications, symbolism, and systems, procedures, and processes—reflect its values and beliefs.

Training

Training has been used as a very important tool for promoting and developing skills related to an organization's beliefs and values. Corning, for example, has made training the cornerstone of its efforts to change to a culture that places high value on quality. Its goal is to devote 5 percent of the work year to training. Corning has trained all its 26,000 employees in quality awareness and is now training its employees in communications, problem solving, statistics, interpersonal, group participation, and

management skills to enable them to work in the company's new total quality environment.

Ford also places a high value on training as a tool to instill in its employees its mission, values, and guiding principles. In training on technical, human relations, and management skills, for example, Ford includes discussions and examples emphasizing the importance of supporting its values and beliefs to achieve success.

A Statement of Values and Beliefs

According to company officials, articulating an organization's values and distributing a written statement of those values to employees is an important technique. When Ford began to change its culture about 10 years ago, it developed a written statement of its mission, values, and guiding principles. This statement was an important step in Ford's efforts to change because Ford believes that its culture must flow from and be compatible with its mission and that its employees must clearly understand what its mission is.

Johnson & Johnson has had a written statement of its beliefs and values, called "Our Credo," since the mid-1940s. Over the years, the company has used this credo to guide its business decisions. For example, when someone placed poison in several packages of one of the company's premier products, the company offered full rebates to customers and destroyed all of the product at a cost of \$250 million, consistent with its credo, which states that "our first responsibility is to the doctors, nurses and patients, to mothers and fathers and all others who use our products and services." The company took this step against the advice of every major advertising company and one of the country's most respected business schools, which believed that the company's product market share would never be regained. The company proved them wrong, however, because it did later regain its market share for the product.

Communicating Desired Values and Beliefs

All of the techniques mentioned in this report relate to communicating information to organizational members about company values and beliefs. Some organizations also use newsletters, pamphlets, magazines, in-house television networks, and videotapes to communicate their values and beliefs. Federal Express, Ford, and IBM use their own television networks for this purpose. Johnson & Johnson uses its periodicals to communicate its values and beliefs, and every 2 years, it also administers a questionnaire to employees to measure their perception of the company's success in

living up to its beliefs and values. The questionnaire is also considered an excellent means of communicating the company's values and beliefs to employees.

Management Style

Companies that are changing their culture often have to change their management style, sometimes drastically. When DuPont decided to change its culture to achieve continuous improvement through its people, it began changing from an authoritative to a participative management style. To make this change, DuPont has begun to delegate authority to its employees and allow them to participate in the decision-making process. For example, DuPont established problem discovery and problem solving teams that include organizational members from the highest to the lowest levels of the company. Because it is encouraging and empowering its employees to contribute fully to the company's continuous improvement, DuPont believes that it will be able to achieve its vision of becoming a "great global company through people."

In 1981, Motorola also began changing to a participative management style after it began to change its culture to emphasize quality. Although the company had been people-oriented for years, it began to encourage and empower its employees to suggest better ways to do the work and make decisions. Motorola believes that its employees are willing to risk suggesting improvements that increase efficiency because of its policy not to lay off employees with 10 or more years of service. The company believes that this change will help it to achieve its fundamental objective of providing total customer satisfaction through the reduction of defects in all its products and services to the very low rate of 3.4 per million.

To empower its employees in its cellular telephone business, Motorola made the following changes:

- Employees are now responsible for quality because inspectors were removed.
- Employees can stop the production line when they see problems in the quality of the products.
- Work teams make decisions and select new team members when there are openings.
- Employees conduct reviews of their peers' performance and comment on supervisors' performance.
- Employees monitor their own attendance at work.

Rewards, Incentives, and Promotions

Some companies offer rewards, incentives, and promotions to employees whose behavior supports the desired organizational culture. They believe that these rewards encourage similar behavior in other employees and help to perpetuate or change the culture. For example, 3M's promotion system allows scientists and engineers to rise to high levels in the company without becoming managers. This system allows them time to conduct innovative research. The company also rewards employees who recommend improvements in processes or innovative ideas for new products.

Corning offers a variety of rewards to encourage desired behavior in its employees. In 1990, Corning established the annual "Houghton Quality Award" to reward divisions that exemplify total quality. The company also gives bonuses to production workers when a plant meets its goals and up to 10 percent bonuses for salaried employees based on corporate success. Each division receives 1 percent of its salaries for cash awards, which can amount to 8 percent of an employee's pay. In addition, to recognize exemplary contributions quickly, employees are given thank you cards and dinner for two at a restaurant.

Organizational Gatherings

Some companies use organizational gatherings to explain their values and beliefs to employees. For example, at an annual "quality milestone" event, Corning's chairman of the board addresses the employees on what quality means to the company, and several teams of workers give presentations about quality improvements they have made.

Ford and AT&T used what they call "cascade" meetings to convey and discuss their values and beliefs. The results of meetings at the highest level in the company are passed to employees at the organizational level directly below until employees at the lowest level of the organization have been informed. In this way, the companies are assured that all employees are familiar with their values and beliefs.

Organizational Structure

When developing a culture or considering a culture change, a company generally selects an organizational structure that will suit its desired culture. Federal Express has a more centralized structure than some companies because of its focused mission to provide "totally reliable, competitively superior global air-ground transportation of high priority goods and documents that require rapid, time-certain delivery." At the same time, Federal Express values and supports its employees and has

limited its organizational structure to five layers between the lowest level employee and the chief executive officer.

IBM has reduced the number of layers in its organizational structure in support of its beliefs of respect for the individual, service to the customer, and excellence in execution. This structure change allows more employees to participate in decision-making and speeds the company's decision-making process.

Systems, Procedures, and Processes

Companies that are perpetuating or changing their cultures generally recognize that they must make their systems, procedures, and processes compatible with their values and beliefs. Motorola, for example, focuses on customer satisfaction by attempting to reduce mistakes in its products and at the same time do its work faster. Its objective is to provide customers "out-of-the-box" quality, on-time deliveries, and no early product failures. To achieve this goal, Motorola established a standard measure of quality by the number of defects found per unit. Each quarter, it reviews each division's level of quality in relation to its quality goals. If a division does not meet the goals, the reviews are done monthly; if the goals have still not been met, the reviews are done weekly.

Federal Express believes that customer satisfaction begins with employee satisfaction. Therefore, the company developed systems, procedures, and processes to show that it values its employees. Among these are a no-layoff policy, promotions from within, semiannual performance reviews to help employees identify training needs and improve their skills, a program in which employees may air perceived problems with higher-level management without fear of repercussion, and employee ratings of managers.

Staff Changes

When employees do not support a culture change or do not help to perpetuate the values and beliefs that a company believes are important, some companies replace employees or change their responsibilities. DuPont, for example, has provided generous incentives to employees that agree to retire early. It has also appealed to some employees' sense of duty in asking them to move from key management positions. DuPont values its employees, however, and in making these changes takes care to avoid disrespect and humiliation for the individual.

Federal Express also reassigns employees or changes their responsibilities when it determines that they are not suited for their positions. The company bases its determination on an annual survey questionnaire that indicates whether employees are satisfied with their managers. On the questionnaire, employees rate their managers, and if a manager receives a low score and does not improve, the company tries to find another position within the organization that more closely fits the person's skills. Because the company values its employees, it does not attach a stigma to such a change.

Stories, Legends, and Myths

Some companies repeat success stories, legends, or myths to impress their values and beliefs on employees. Corning, for example, distributed to its quality improvement teams worldwide a notebook of stories on total quality successes. The company also includes stories related to the value of quality in its total quality digest and in company and division newspapers. One story exemplified the importance of viewing a product through the customer's eyes. On a tour through a customer's plant, Corning employees were shown samples of a chipped and cracked Corning product and a competitor's product that was in good condition. Corning was in danger of losing the customer's business because of the poor quality of the product. Corning's plant manager asked each plant employee for ideas to resolve the problem. Through teamwork, the problem was resolved and the customer was retained.

IBM also distributed a book of quality success stories. In one story, employees had reduced the building, testing, and delivery time for an airborne communications location system from 120 days to 45 days. Although IBM accomplished this task as a special effort to support the Army during Operation Desert Shield, many of the changes made to accomplish the reduction have since become standard procedures and have thus increased the timeliness of operations.

Finally, a famous story in Johnson & Johnson—a company that values innovation—is about the firing of James Burke, who later became the company's chairman of the board. Mr. Burke was fired by a former chairman, General Johnson, for making a mistake. The following day, General Johnson rehired Mr. Burke and publicly announced that what the company needed was people who made mistakes. The point was that if people do not risk making mistakes in their efforts to be creative, nothing innovative would ever happen.

Company Heroes and Heroines

Some officials believe that a good technique to encourage people to support a company's values and beliefs is to make heroes or heroines of exemplars of those values. Every quarter, each division at Corning singles out employees who exemplify the company's beliefs and values, particularly those related to quality. The division recognizes these employees' contributions in front of the other divisional members to make their efforts well known. In addition, Corning includes in a quality milestone book pictures of team members who have presented quality improvement success stories at the annual "quality milestone" event. Thus, these employees become well known for their contributions throughout the organization.

At DuPont, the Vice President of the Materials, Logistics, and Services Division, which is leading the company's effort to change its culture, presents a quality leadership award to employees who have made important contributions to improving quality. DuPont believes that other employees will emulate the employees whose accomplishments have been recognized, rewarded, and publicized.

Hiring the Right People

Some companies attempt to recruit people who believe in or are willing to accept the organizations' desired values and beliefs. The companies we visited, however, have not fully developed processes and procedures to ensure success at this effort. Corning is moving toward hiring people it believes will work well as team members and who are open and flexible by having Corning team members participate in the hiring process. Some parts of the company also test prospective employees to see if they will fit into the culture.

Although Federal Express does not try to determine if a prospective employee will fit into its culture in all respects, in the last 5 years, it has used tests to help predict whether an applicant will be successful at the work expected. The company looks for people with the particular skills needed to perform or to learn to perform a job.

Academics and literature have discussed communications in the hiring process as a means of modifying the attitudes of prospective employees. They note that it is important to communicate realistically the organization's current and desired beliefs and values and both positive and negative aspects of the job. They believe that this can help in attracting and retaining employees who share the organization's desired beliefs.

**Appendix I
Techniques That Are Important to
Perpetuating or Changing an Organizational
Culture**

Slogans

Some of the companies use slogans to symbolically communicate their desired values and beliefs. For example, 3M believes slogans it has used, like "People count at 3M," "Innovation working for you," and "What won't they think of next," have served as a means of communicating values and making employees proud of the company they work for.

**Assigning a Culture
Manager**

Some companies have assigned a person or group to **facilitate** their culture change efforts. For example, Corning has a manager of corporate quality and a quality council. Most have not, however, because company officials generally believe that many employees should be involved in their culture change or perpetuation efforts. They consequently rated assigning a culture manager as the least important of the techniques they use.

Academics With Whom We Discussed Organizational Culture

Dr. Terrence E. Deal, Professor of Education and Human Development,
Peabody College of Vanderbilt University

Dr. J. Steven Ott, Assistant Professor of Public Administration, University
of Maine

Dr. Vijay Sathe, Professor of Organizational Behavior, Claremont Graduate
School of Claremont College

Dr. Edgar H. Schein, Professor of Management, Sloan School of
Management of the Massachusetts Institute of Technology

Dr. Alan L. Wilkins, Associate Professor of Organizational Behavior,
Brigham Young University

Major Contributors to This Report

National Security and
International Affairs
Division, Washington,
D.C.

Uldis Adamsons, Assistant Director
F. Earl Morrison, Evaluator-in-Charge
Arnett Sanders, Evaluator
Dr. Marilyn Mauch, Social Science Analyst
Nancy L. Ragsdale, Editor

Selected Bibliography

Albert, Michael. "Transmitting Corporate Culture Through Case Stories." Personnel, Vol. 64, No. 8 (1987), pp. 71-73.

Allaire, Yvan, and Mihaela Firsiroiu. "How to Implement Radical Strategies in Large Organizations." Sloan Management Review, Vol. 26, No. 3 (1985), pp. 19-34.

Allen, Robert F., and Charlotte Kraft. The Organizational Unconscious—How to Create the Corporate Culture You Want and Need. Englewood Cliffs, N.J.: Prentice-Hall, 1982.

Angle, Harold L., Charles C. Manz, and Andrew H. Van de Ven. "Integrating Human Resource Management and Corporate Strategy: A Preview of the 3M Story." Human Resource Management, Vol. 24, No. 1 (1985), pp. 51-68.

Barney, Jay B. "Organizational Culture: Can It Be a Source of Sustained Competitive Advantage." Academy of Management Review, Vol. 11, No. 3 (1986), pp. 656-665.

Bunn, Harry. "Armonk: A Portrait of Success (IBM)." Computerworld, Vol. 19, No. 48 (1985), pp. 18-34.

Burgower, Barbara. "Sweetening the Lure of the Lab (3M)." Business Month, Vol. 136, No. 2 (1990), pp. 76-77.

Byrne, John A. "The Rebel Shaping Up Exxon." Business Week, No. 3061 (1988), pp. 104-107, 110-111.

_____. "Businesses Are Signing Up For Ethics 101." Business Week, No. 3038 (1988), pp. 56-57.

Chapman, Paul. "Changing the Corporate Culture of Rank Xerox." Long Range Planning, Vol. 21/2, No. 108 (1988), pp. 23-28.

"Corporate Culture: The Hard-to-Change Values That Spell Success or Failure." Business Week, No. 2660 (1980), pp. 148-154, 158-160.

Deal, Terrence E., and Allan A. Kennedy. Corporate Cultures: The Rites and Rituals of Corporate Life. Reading, MA: Addison-Wesley Publishers, 1982.

Denison, Daniel R. Corporate Culture and Organizational Effectiveness. New York: Wiley, 1990.

Dent, David J. "Overnight Sensation (Federal Express)." Black Enterprise, Vol. 18, No. 11 (1988), pp. 308-314.

Desatnick, Robert L. "Management Climate Surveys: A Way to Uncover an Organization's Culture." Personnel, Vol. 63, No. 5 (1988), pp. 49-54.

Deshpande, Rohit, and A. Parasuraman. "Linking Corporate Culture to Strategic Planning." Business Horizons, Vol. 29 (1986), pp. 28-37.

Duncan, W. Jack. "Organizational Culture: 'Getting a Fix' on an Elusive Concept." The Academy of Management Executive, Vol. 3, No. 3 (1989), pp. 229-236.

_____, et al. "Intrapreneurship and the Reinvention of the Corporation." Business Horizons, Vol. 31, No. 3 (1988), pp. 16-21.

Feldman, Steven P. "Management in Context: An Essay on the Relevance of Culture to the Understanding of Organizational Climate." Journal of Management Studies, Vol. 23 (1986), pp. 587-607.

Finney, Paul B. "Even At Big Blue, The Corporate Culture Had To Change (IBM)." Business Month, Feb. 1989, pp. 69-70.

Fitzgerald, Thomas H. "Can Change in Organizational Culture Really Be Managed?" Organizational Dynamics, Vol. 17 (1988), pp. 4-15.

Flint, Jerry. "We Need Manufacturing People At The Top (Ford)." Forbes, Aug. 20, 1990, pp. 58-60.

Francis, Dave, and Mike Woodcock. Unblocking Organizational Values. Glenview, IL: Scott, Foresman and Company, 1990.

Freedman, Alix M. "DuPont Trims Costs, Bureaucracy to Bolster Competitive Position." Wall Street Journal, Eastern Edition, Sept. 25, 1985, pp. 1, 19.

Frost, Peter J., et al. Organizational Culture. Beverly Hills, CA: Sage Publications, 1985.

"Greater Concern for Ethics and the 'Bigger Backyard.'" Management Review, Vol. 75, No. 7 (1986), pp. 28-29.

Guiles, Melinda Grenier, and Paul Ingrassia. "Ford's Leaders Push Radical Shift in Culture as Competition Grows." Wall Street Journal, Eastern Edition, Dec. 3, 1985, pp. 1, 26.

Haavind, Robert. "Motorola's Unique Problem: What to Do for an Encore." Electronic Business, Vol. 15, No. 20 (1989), pp. 60-66.

Harris, Philip R. Management in Transition. San Francisco, CA: Jossey-Bass, 1985.

Houghton, James R. "The Old Way of Doing Things Is Gone (Corning)." Quality Progress, Sept. 1986, pp. 15-18.

Hughes, Holly. "Defining Corporate Culture With Meetings." Successful Meetings, Vol. 34, No. 31 (1985), pp. 27-30.

Inglesby, Tom. "Is There a Ford in the Future?" Manufacturing Systems, Vol. 6, No. 3 (1988), pp. 14-15.

Jespersen, Fred F. "The Q&A/Edgar H. Schein: Corporate Culture Is the Real Key to Creativity." Business Month, Vol. 133, No. 5 (1989), pp. 73-75.

Kilmann, Ralph H., Mary J. Saxton, Roy Serpa, and Associates. Gaining Control of the Corporate Culture. San Francisco, CA: Jossey-Bass, 1985.

Koprowski, Eugene J. "Cultural Myths: Clues to Effective Management." Organizational Dynamics, Vol. 12, No. 2 (1983), pp. 39-51.

Kovach, Barbara E., and James Parish. "How to Lead the Metamorphosis." Training & Development Journal, Vol. 42, No. 12 (1988), pp. 40-43.

Lehr, Lewis W. "The Care and Flourishing of Entrepreneurs at 3M." Directors & Boards, Vol. 10, No. 2 (1986), pp. 18-20.

Lessem, Ronnie. Managing Corporate Culture. Brookfield, VT: Gower Publishing, 1990.

"Lessons From a Successful Intrapreneur (3M)." The Journal of Business Strategy, Vol. 9, No. 2 (1988), pp. 20-24.

Martin, Joanne, and Caren Siehl. "Organizational Culture and Counterculture: An Uneasy Symbiosis." Organizational Dynamics, Vol. 12, No. 2 (1983), pp. 52-64.

Martin, Thomas N., and Joy Van Eck Peluchette. "Employee Orientation." Personnel Administrator, Vol. 34, No. 3, pp. 60-64.

Meares, Larry B. "A Model for Changing Organizational Culture." Personnel, Vol. 63, No. 7 (1986), pp. 38-42.

Messikomer, Edward E. "DuPont's %Marketing Community." Business Marketing, Vol. 72, No. 10 (1987), pp. 90-94.

Mishne, Patricia P. "A New Attitude Toward Quality." Manufacturing Engineering, Vol. 10, No. 4 (1988), pp. 50-55.

_____. "A Passion for Perfection (Ford)." Manufacturing Engineering, Vol. 101, No. 5 (1988), pp. 46-58.

Mitchell, Russell. "Masters of Innovation: How 3M Keeps Its New Products Coming." Business Week, Apr. 10, 1989, pp. 58-63.

Moskal, Brian S. "Glasnost in Dearborn (Ford)." Industry Week, Vol. 234, No. 6 (1987), pp. 53-55.

O'Reilly, Charles. "Corporations, Culture, and Commitment: Motivation and Social Control in Organizations." California Management Review, Vol. 31, No. 4 (1989), pp. 9-25.

Osborn, Thomas. "How 3M Manages For Innovation." Marketing Communications, Vol. 13, No. 11 (1988), pp. 17-22.

Ott, J. Steven. The Organizational Culture Perspective. Chicago, IL: Dorsey Press, 1989.

Ouchi, William G. Theory Z: How American Business Can Meet the Japanese Challenge. Reading, MA: Addison-Wesley, 1981.

Pascale, Richard. "Fitting New Employees Into the Company Culture." Fortune, May 28, 1984, p. 28(6).

_____, and Anthony G. Athos. The Art of Japanese Management. New York: Simon and Schuster, 1983.

Pederson, Jesper S., and Jesper S. Sorenson. Organisational Cultures in Theory and Practice. Brookfield, VT: Avebury, 1989.

Peters, Thomas J., and Robert H. Waterman, Jr., In Search of Excellence. New York: Harper and Row, 1982.

Petrock, Frank. "Corporate Culture Enhances Profits." HRMagazine, Vol. 35, No. 11 (1990), pp. 64-66.

Plant, Roger, and Mark Ryan. "Managing Your Corporate Culture." Training & Development Journal, Vol. 42, No. 9 (1988), pp. 61-64.

Popovich, Paula, and John P. Wanous. "The Realistic Job Preview as a Persuasive Communication." Academy of Management Review, Vol. 7, No. 4 (1982), pp. 570-578.

Rausch, Bernard A. "DuPont Transforms a Division's Culture." Management Review, Vol. 78, No. 3 (1989), pp. 37-42.

Reynierse, James H. "Measuring Corporate Culture." The Bankers Magazine, Vol. 169, No. 5 (1986), pp. 64-67.

Sathe, Vijay. "Implications of Corporate Culture: A Manager's Guide to Action." Organizational Dynamics, Vol. 12, No. 2 (1983), pp. 4-23.

Schein, Edgar H. Organizational Culture and Leadership. San Francisco, CA: Jossey-Bass, 1985.

Schein, Lawrence. A Manager's Guide to Corporate Culture. New York: Conference Board, 1989.

Schwartz, Howard, and Stanley M. Davis. "Matching Corporate Culture and Business Strategy." Organizational Dynamics, Vol. 10, No. 1 (1981), pp. 30-48.

Shanklin, William L. "Fortune 500 Dropouts." Planning Review, Vol. 14, No. 3 (1986), pp. 12-17, 46.

Simmons, John. "Partnering Pulls Everything Together (Ford)." Journal for Quality and Participation, June 1989, pp. 12-16.

Smith, Frederick W. "Empowering Employees (Federal Express)." Small Business Reports, Vol. 16, No. 1 (1991), pp. 15-20.

_____. "Productivity and Quality Ties Can't Be Ignored (Federal Express)." Journal for Quality and Participation, Vol. 11, No. 2 (1988), pp. 16-17.

Stoner, Charles R. "The Foundations of Business Ethics: Exploring the Relationship Between Organization Culture, Moral Values, and Actions." SAM Advanced Management Journal, No. 3 (1989), pp. 38-43.

Therrien, Lois. "Motorola Sends Its Work Force Back to School." Business Week, June 6, 1988, pp. 80-81.

_____. "The Rival Japan Respects (Motorola)." Business Week, Nov. 13, 1989, pp. 108-118.

Tichy, Noel M., and David O. Ulrich. "The Leadership Challenge: A Call for the Transformational Leader." Sloan Management Review, Vol. 26, No. 1 (1984), pp. 59-68.

Tunstall, W. Brooke. "Cultural Transition at AT&T." Sloan Management Review, Vol. 25, No. 1 (1983), pp. 15-26.

_____. Disconnecting Parties: Managing the Bell System Breakup—An Inside View. New York: McGraw-Hill, 1985.

Uttal, Bro. "The Corporate Culture Vultures." Fortune, Vol. 108, No. 8 (1983), pp. 66-72.

Wagel, William R. "Corning Zeroes in on Total Quality." Personnel, July 1987, pp. 4-9.

Watson, Thomas J., Jr. "A Business and Its Beliefs (IBM)." Computerworld, Vol. 19, No. 48 (1985), pp. 35-38.

Weihrich, Heinz. "How to Achieve Excellence by Managing the Culture in Your Company." Industrial Management, Vol. 31 (1989), pp. 28-32.